

**INSTALLATION OF
X-RAY APPARATUS SPECIAL AUGMENTATION
(C-ARM), 6520-01-452-0956
FIELD DEPLOYABLE UNIT
MODEL: BV300FD
INTO
TWO-SIDED EXPANDABLE TACTICAL SHELTER
WITH
TWO OPERATING TABLES MODEL: 2080M.**



C-ARM ASSEMBLY

Weight: 661 pounds w/o transport wheels



MOBILE VIEWING STATION

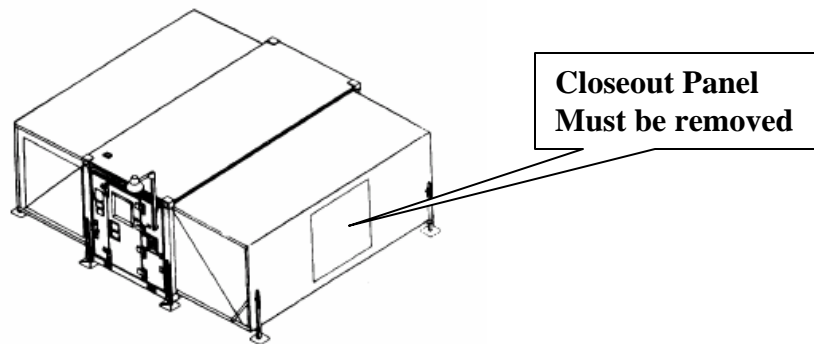
Weight: 539 pounds



**C-Arm X-ray Apparatus: Model BV300FD
Installed in a Two-Sided Expandable Tactical Shelter
Medical Materiel Set M-301
and
Two Operating Tables: Model 2080M Surgical Tables**

PURPOSE: The purposes of this exercise are as follows:

1. To complete the installation of the C-Arm X-ray Apparatus: Model BV300FD into a 3x1 tactical shelter equipped with MMS-301 and two 2080M operating tables.
2. The tactical ISO shelter will be expanded. While viewing the shelter from the personnel door remove the right-hinged end-wall closeout panel.



3. Prior to placing the C-Arm transportation plate into position remove all of the floor cargo tie-down rings.
4. Place the transportation plate onto the ISO floor being careful not to allow the corners of the plate to contact the floor and cause damage. The plate must be oriented as pictured below.





Photo at left illustrates how the mounting hole on the plate should match the location of the mounting holes in the floor of the shelter and the installed tie-down fitting .

5. Installation of the C-ARM Apparatus into a 3x1 Shelter.



a. To make room for the C-Arm Apparatus, the Operating Tables and base plate will be moved all the way to the personnel door side at the second D ring hole from the end.



b. C-Arm Assembly and Mobile Viewing Station being positioned for uncrating. See photos at left and below.



Remove the C-Arm from the shipping container.

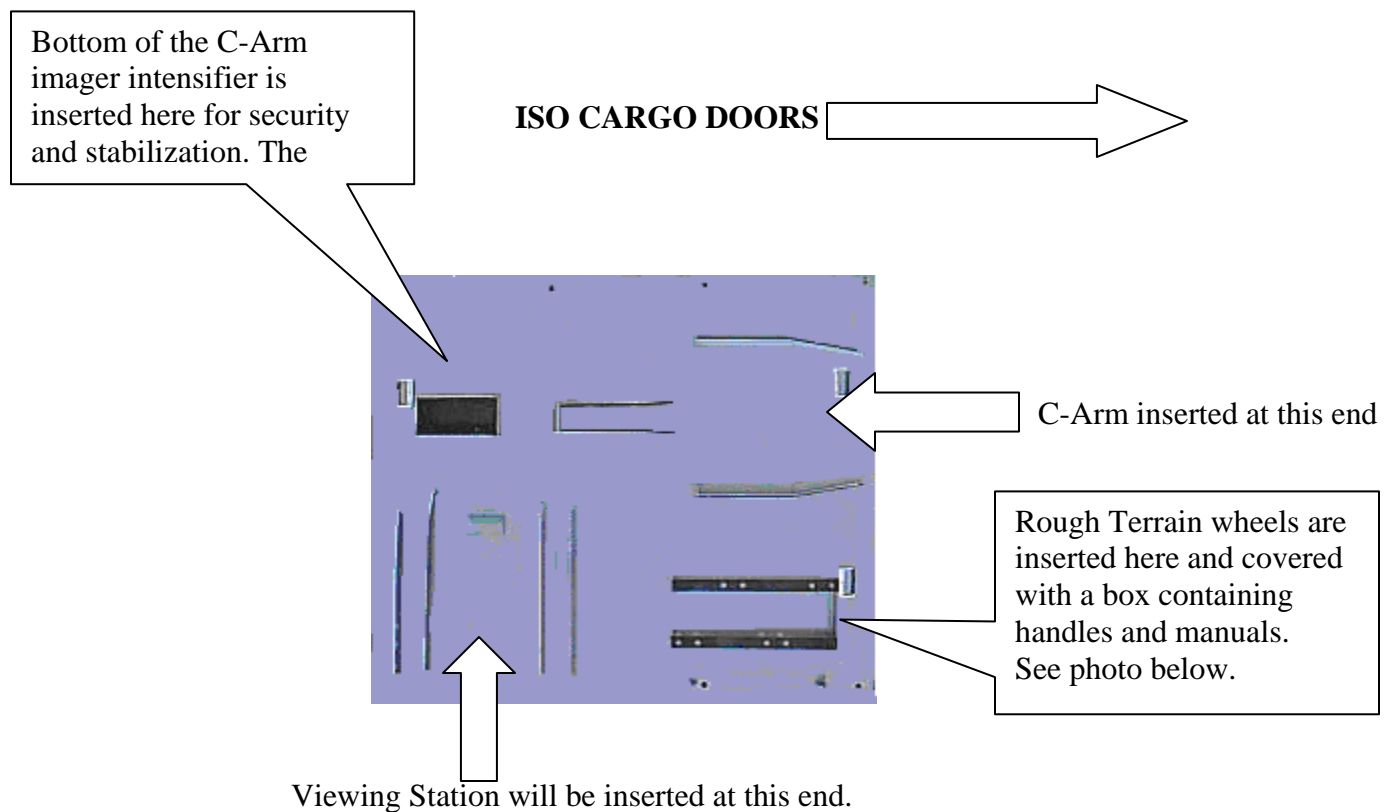


Remove the Viewing Station from the shipping container.



c. Install the three rough terrain wheels to the video viewing station assembly for easy ground handling.

d. Description of the transporting plates for the C-arm and viewing station.



e. Maneuvering the C-Arm onto the transportation plate.

(Note the limited space available for maneuvering the apparatus onto the transportation plate).



f. The C-Arm is controlled during maneuvering using the two pink handles seen the photo. One handle controls the front wheels; the other controls the rear wheels.



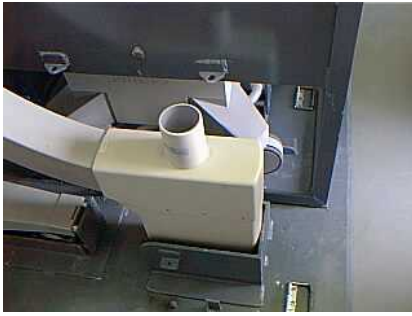
g. The viewing station is covered by a protective metal cover that is strapped down for security.



h. The rough terrain ground handling wheels are secured to the transporting plate with a strap.



i. The nose wheels are secured in this box mounted above the other four ground handling wheels. This container also holds the ground handling bars, one each for the C Arm and the viewer. The Technical Manuals are also stored in this box.



- j. The C-Arm Image Intensifier is slide into this fixed bracket on the transport plate. The operator must be very careful when inserting the intensifier into this bracket because damage to the C Arm can occur.



- k. The forward wheel of the C-Arm is secured to the transporting plate by a locking plate.



- l. The C-Arm control area, the forward wheel, and the bottom C Arm imager intensifier are covered with a protective metal cover after it is secured in the transport plate.

- m. The three photos below show the Viewing Station inserted into the transportation plate and the metal frame used to stabilize and protect the monitors during transport



This photo also shows the locking device used to secure the C-Arm and Viewer to the transport plate. There are three locking devices for each system.

n. The photos below show the C Arm and viewer secured and ready for transport.



Photo shows the protective metal covers mounted over the viewer and sections of the C Arm.



The upper image intensifier is secured with a strap as shown.

o. The final stage is to secure all remaining equipment prior to moving the shelter to a commercial weigh station.



Photo shows the location of two operating tables less the cover to the transportation plate and C-Arm Apparatus when prepared for transportation.



Another view of the C-Arm Apparatus in the secured to the transport plate with the metal protection covers in place and tied down.



After the Operating Tables and the C-Arm Apparatus are covered and secured the additional space will be used for loading and securing the rest of the equipment

There are several ways to get the best fit for the rest of the equipment.

Two are shown below



All the equipment when finally loaded must be secured by the cargo netting prior to closing the ISO Shelter and transporting.

After installation of the C-Arm X-ray Apparatus verify that the weight of the shelter remains within the gross weight limitation of 15,000 lbs. Weigh and properly mark the appropriate external surface of the ISO shelter with proper LIN and new weight.

Conduct an operational test of the X-ray before and prior to patient use.

The transporting plate was modified to accept loading of the apparatus from the side door. When not in use in the operating room the C Arm Apparatus is kept in a TEMPER tent that is attached to the operating room via a passageway.

When needed in the operating room the C Arm Apparatus is rolled from the tent through the passageway and through the side door into the operating room. The efficiency of loading the C Arm into the shelter in preparation for moving will be enhanced if the side door is used.

**INSTALLATION OF
X-RAY APPARATUS RADIOGRAPHIC (C-ARM)
6520-01-452-0956
FIELD DEPLOYABLE UNIT
MODEL: BV300FD
INTO
THE DEPMEDS ISO CONTAINER (MILVAN)**

1. When installing the C-ARM into the DEPMEDS MILVAN with the 4k forklift and all of the x-ray apparatus items remain in the manufactures shipping containers.
2. A complete inspection of the x-ray items must be performed and all parts secured inside the shipping containers.



Inspecting the x-ray apparatus for proper security within the manufactures shipping containers prior to installing the containers into the MILVAN

The MILVAN container must be half empty and the side doors opened.



The Mobile Viewing Station must be installed first on the left side of MILVAN and though the end doors of the MILVAN. (NOTE: Plastic shock absorbers have been removed from the "Mobile View Station" container to allow entry into the MILVAN.

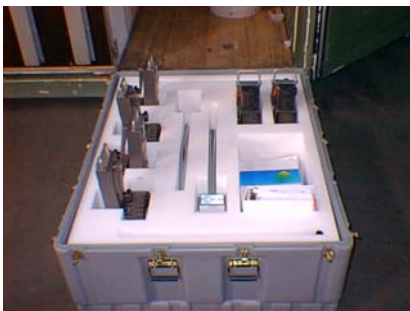
Strap the C-Arm Assembly container to the 4k Forklift then using a ground guide place the assembly into the left side of the MILVAN.



When using the 4k forklift the shipping container must be strapped to the 4k using the standard army cargo strap. A ground guide must be present at all times.



Placing blocks of wood onto the shipping container. Use the forks on the 4k to push the container into the MILVAN being careful not to damage the container. Once located close and secure the end doors of the MILVAN.



Place the hardigg case containing the wheels, associates and manuals total weight 500lbs. into the container through the side door, then block and brace the equipment, close and secure the side doors and mark the MILVAN for shipment.